

Do tech businesses require accounting to be different?

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1. INTRODUCTION

It has been argued that we are now at the start of a new industrial revolution. There have been others of course. The first revolution happened 250 years ago. Its engine was mechanization. Another, focused on electrification and mass production, took place 100 years ago and, 50 years later, electronics and automation started a third revolution. Today, our physical and virtual worlds are converging and this is impacting the way we produce, consume, move, communicate, and interact. How we are reacting is different because, during the first three revolutions, not many people were aware of the scale of changes taking place. But there are few scholars in the present day who are unaware that we are in a period of transformation that is epochal. As the fourth industrial revolution unfolds, the material and the digital are merging, thus opening up large possibilities to reconfigure our activities, including economic exchanges and managerial innovations. And if we choose to, we can influence the direction of the revolution that has begun. This awareness is essential, because it will enable financial management to be leveraged by enterprise executives so as to alter the direction of change. In essence, accounting provides the lens through which to shape the future – but it must be the right form of accounting, calibrated today in order to help us designing

what tomorrow will look like. In this essay, I consider the altered landscape which technology has created for start-ups and discuss the concurrent re-focus that is required of accounting aimed at tech-entrepreneurship decision making. The ideas expressed herein are condensed from Bhimani (2017).

A galaxy of opportunities exists for coupling new technologies with commerce – and some start-ups doing this right now will undoubtedly become the tech titans of tomorrow. Attempting to create economic value out of tech ideas is no longer the domain of firms which can address the requirements of resource-intensive investments. Many small firms with minimal capital have simply combined Google's capacity to unleash information with accessing 1/5 of the globe's population via Facebook. The ready availability of cheap web services and the many possibilities for developing ad content and getting it in front of readers through Google AdSense or Amazon affiliates, for instance, have provided everything that is required to create and position a tech business. So, anyone who can sense that we are in the midst of an ongoing industrial revolution can act on a tech start-up idea. But what remains less evident is that tech businesses need a particular approach to financial management.

2. WHY DO WE NEED ACCOUNTING?

Accounting has always assisted business decision makers to target financial returns by considering, through the eyes of accounting information, certain key questions:

- Is the business creating value?
- Is it creating as much value as it set out to?
- Is it using the fewest resources to generate the most value possible?

Tech start-ups are no different in having to address these questions. However, their financial circuitry is different from conventional industrial era companies. Tech entrepreneurs require a lens that enables them to home in on financial strategies that are aligned with their cost structures and economic objectives. Traditional accounting does not provide this lens. And, like other

sectors, tech start-ups not only need financial and other metrics to manage the business, but they also have to meet investors' information requirements. Investors will set economic and operational targets which should be made available via financial information about the progress of the business. Thus, in the tech innovation space, financial information of the right type is crucial.

3. WHAT IS REALLY DIFFERENT ABOUT TECH?

At the heart of technological change lies disruption. Thus, in the tech world, there is no set way of doing things. Start-ups always experiment with different ways of using technology, so they can determine new forms of benefit for consumers. Business models in tech firms may, for instance, rely on better quality of supply, more transparent offerings, lower prices, new ways of bundling services, etc. At times, entirely new drivers of value create their own further market needs. Hence, we cannot expect financial management understanding to stay fixed where technology and operations have witnessed large scale transformations and where business models have shifted from the premise of industrial commercial endeavours. We may illustrate the issue by considering innovative contexts where technology has transformed the financial circuitry of tech businesses.

We look at some illustrations: it is the case that many traditional industrial firms relied on producing in large quantities, making profit through economies of scale. Such firms sell products at prices below smaller businesses by focusing on the supply side, including buying in large bulk so as to push down their material costs. These large firms could also invest in faster and more flexible technologies. As their costs went down, their efficiency rose, enabling them to become profitable giants in their industrial sectors. Conversely, tech firms focus on demand. They use technological innovations to create and expand networks. The growth of networks often becomes self-reinforcing, because users get value out of connections – thus, connections grow. A larger user base in the network will increase demand for the product. Then, this fuels further network expansion and subsequent demand. Sometimes, networks connect with other networks, creating even more value. If business transactions grow because networks expand in many directions and defy linear pathways, so there is little value in relying on financial information premised on a supply focus which only captures linear paths of value creation.

Second, it is growingly clear that tech start-ups need to continuously experiment to innovate. They are not like traditional business ventures, where resources are evaluated in terms of what is needed to serve a market segment for a product which has a known value. There is no such certainty in fast evolving tech environments, where the product-market fit continuously evolves. A tech firm may want to experiment with a new website feature, it may wish to explore building relationships with influencers, it may seek to test out an altered product angle, it may try out a differential pricing scheme, it may attempt to play around with a mobile-responsive template, it could explore novel organic tactics to increase online traffic, and so on. Some experiments may produce very small business impacts, while others could trigger strategic-level changes. From a financial viewpoint, a tech firm will want to have specific ways of tracking activities that help determining what actions to take and when they should be undertaken. The key is that accounting information assists in manoeuvring the start-up in a very specific way, through close tracking and monitoring of experimental activities.

Third, the tech firm may be mobilising a business model premised on the idea that when customers make money, then the tech start-up also gets a proportion of the value created. For tech platforms, like Airbnb and Uber, the intent is simply enabling users who need a service or product to come together with suppliers who have unused capacity, benefitting all parties. Models associated with the sharing economy rely specifically on new sources of value creation being brought into the market from existing supplies. Conventional suppliers, such as taxis, trains, and other pre-existing transport services traditionally had to invest in new resources to bring to action their business model. But tech start-ups in this type of business space allow existing supply sources to be unleashed, bringing spare capacity onto the market. All that is required is an effective technological platform. As a result of the

increasing supply of services, traditional providers will have to share the customer's spend with new suppliers. This will bring prices down across the whole industry, because supply has grown. And larger supply and lower prices widen the customer reach. So, some of the profits go to the new suppliers of spare capacity and some of them go to the consumers, who have more choice now,

4. WHAT ABOUT INVESTORS?

Assessing risk is a conditioned reflex for all investors and managers. Deciding on a course of action usually involves looking at the value of the desired outcome and weighing this against the costs of acting, as well as taking possible unintended effects into account. People usually make financial decisions expecting that the rewards tally with the risks absorbed. Certainty carries little risk, so the payoff tends to be smaller. But higher returns are clearly expected from a risky proposition, because of the potential for low returns or even losses. For tech start-ups, two broad categories of risk exist. The first is the *business risk* around the product, the technology, or the market. For instance, there could be issues with the product if its quality, features, or delivery preferences are sub-standard. There might be technological failings when it comes to development, provision, or servicing of the product. Perhaps the intended customers are not receptive of the product concept. The market could be too small or it could be shifting too fast towards other solutions or services. These are all potential business risks. The other category relates to the *financial risk* of the firm. How the business funds itself (and its cost structure) will affect the risks a start-up faces. Over the past decade, both types of risks changed pretty much across all business markets, industries, and platforms, due to novel technologies and economic innovations. As a consequence, opportunities for tech start-ups to create value have expanded very quickly. Naturally, so have the challenges and risks. It is clear that pegging risk to the level of expected returns is what keeps underpinning investment decisions.

An investor that considers funding a tech start-up will check to see that the risk-return relationships show balance. Investors will consider how viable a concept

with lower price points being available.

There are many other ways in which tech start-ups differ from traditional firms, making conventional accounting information too narrow to assist in effective decision making. Nowadays, disruptive start-ups, for these and other reasons, make it essential that tech-focused financial management is put into place.

is at the outset and how well the start-up can sustain successful operations in the longer run. There will be an assessment of a tech start-up's idea, the market, and the team in particular, to be confident that they can deliver. In terms of the product concept and market, an investor will look for a competitive differential feature. Perhaps the start-up can better execute something that already has an existing market. Or it might advance an entirely new business service or be mobilising a market to be developed. Perhaps the product has lock-in capability, where there is resistance for a customer to move away once they have adopted a product in terms of effort and time. If the concept enjoys network effects, this could be a very attractive opportunity, where fast business development and growth become important.

The investor will also want to see whether there is uniqueness in the technology and how far the concept has been developed by the time he steps in. This analysis as a whole comes down to assessing risk and return potential. Tech start-ups tend to have low chance of high payoffs in the long term, but a high chance of large immediate cash needs. This is not a problem – in fact, it is what makes tech start-ups so attractive to specific investors. If the payoffs are likely to be positive, but not very high, many tech investors would stay away. And if a start-up's funding needs are low where there are high expected returns, it is likely that funding will be met through other means. Focusing solely on the risk-return dimensions of an investment, investors will seek high risk/high return features, which generally is what tech start-ups exhibit. So, tech business founders need to understand risk through the investor's eyes.

5. WHAT TYPE OF ACCOUNTING?

Start-ups need to keep tweaking their activities on the basis of any new information received and they ‘pivot’ their business model when the trajectory needs to change. A start-up requires a formal process for this experimental way of operating that will help it in:

- Planning its activities;
 - Acting on desired pursuits;
 - Monitoring outcomes;
 - Changing and refining any new action plans;
- Keeping investors informed and reassured.

These are common issues to all firms’ managerial needs. Business operators must do two basic things: identify their pursuits and put those plans into action. Once a point is reached, where the impact of those actions may be assessed, measures of deviations should be on hand to provide explanations for deviations from

what was expected. On the basis of this learning, new plans to guide future action are made. This applies as noted to all businesses. However, to be successful, a tech business needs to have a mechanism for analysing new information from the external business world and from its own operations. It must seek to know what could and should change its business model as it evolves. Unlike conventional industrial firms, tech start-ups do not have access to extensive historical trends of financial operations or precedents or benchmarks. It is not so clear how they might progress positively. So, tech businesses must seek information from the market and external sources and continuously assess the implications for their own activities. The ‘financial control loop’ is an approach that can assist in bringing a start-up’s financial information needs into focus. This looks like displayed in Figure 1.

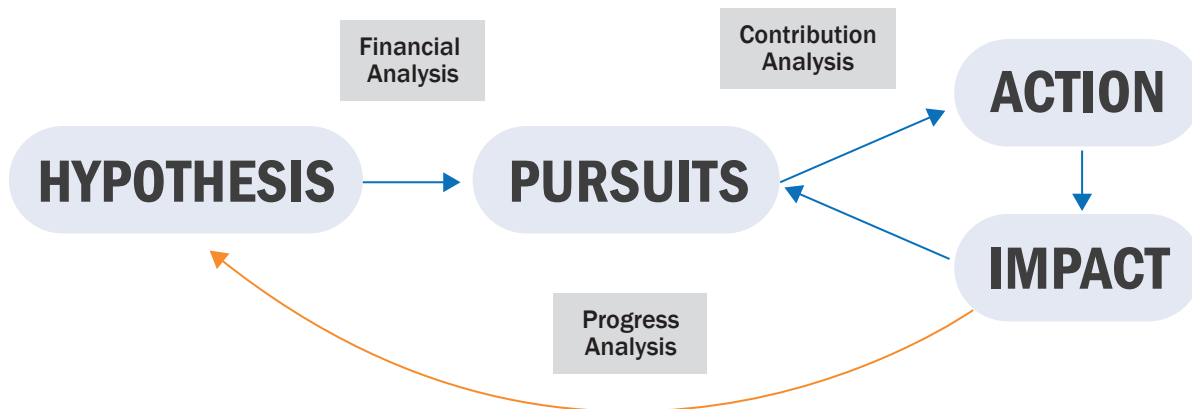


Figure 1. *The tech start-up’s ‘financial control loop’.*
Source: Bhimani (2017, p. 45).

This tool will help formalising what a tech business must do to raise finance and it supports a feedback process of planning, acting, and monitoring and ploughing learning back into operations. Essentially, business pursuits should be founded on a broad hypothesis, which then underpins the business model. The financial control loop captures three essential and specific steps for the financial control of a tech start-up. The first step covers what information is needed in relation to costs and contributions, so as to understand what a start-up can yield financially. Subsequently, there is a need to undertake

financial analysis of the business. Finally, financial metrics should be applied, providing detailed assessment.

In effect, cost changes must be examined before deriving some understanding of business performance in financial terms, in order to ultimately steer the enterprise towards the entrepreneur's viewpoint. Once there is robustness in financial monitoring, people can control operations through a feedback loop of information and identify how to raise further finance and how the business is advancing towards the investors' strategic exit intent.

REFERENCE

Bhimani, A. (2017). *Financial management for technology start-ups*. London: Kogan Page.